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#### ABSTRACT

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This monograph from the Center for Child Well-Being, looks at children's well-being holistically, integrating physical, cognitive, and social-emotional dimensions. The monograph begins by identifying elements of child well-being and then reviews the literature on well-being, describing foundational elements in physical, social-emotional, and cognitive well-being and their interrelationships. With these elements in mind, the monograph then discusses scientific implications and next steps in their application to child health and development (these include producing a governing framework, enhancing indicators of well-being, building a directory of indicators, creating a registry for interventions, developing a national index of well-being, and establishing a parenting network). The monograph concludes with recommendations for the future of child well-being, including developing a strategic plan and an alliance of child well-being partners. (Contains 142 references.) (EV)



# Action Research in Family and Early Childhood

# Foundations of Child Well-Being

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UNESCO Education Sector Monograph No 18 / 2001



## Foundations of Child Well-Being

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### UNESCO

Action Research in Family and Early Childhood

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#### Foreword

Learning begins at birth. All children are born with the capacity to learn, the most solid base on which any society can build. Of the more than 800 millions 0 to 6 year old children in the world, less than a third benefit from early childhood education programmes.

The challenge is enormous because of the demographic pressures and increased poverty that most countries experience. Yet, efficient and low-cost options for early childhood exist, and are adapted to the needs of children, the life conditions of families, the culture and resources of countries. Their implementation depends more on creating adequate political and social will than on any other factor.

#### UNESCO's actions in Early Childhood and Family Education

#### Background

Most countries have been going through a period of rapid population growth, increased urbanisation, important social disparities, great numbers of out-of-school children and the alarming progress of AIDS. Disadvantaged families and young children are subject to its worst effects. UNESCO's actions have addressed the issues of early childhood care and education by strengthening national and regional capacities in the areas of research, training, programming and information, to enable early childhood professionals to design appropriate solutions to the national needs in early childhood.

#### Responding to Government priorities, commitment and participation

National authorities are seeking to strengthen early childhood programmes - in particular if they are community-based, improve their quality and content, as well as the training of all those involved in early childhood activities. They also want to ensure that these programmes cover children between 0 and 6, and not just those between 3 and 6 years, and are, in some cases, in the process of establishing national early childhood programmes. Regarding women and families, a number of countries wish to increase information and training regarding Family Life Education and legislation in favour of women and families, as well as putting into practice and teaching the Convention on the Rights of the Child. In each country, a number of resource persons and institutions exist in the area of Early childhood, service provision and materials production. Thus the following are often identified as priority areas regarding children and women where outside support would be beneficial:

- <u>Initial and in-service Training</u>: early childhood personnel, social workers, trainers, as well as vocational training for women.
- <u>Information/documentation on children and families</u>: strengthening of available resources, computerization of data collection and processing.
- Children's Rights: training in the area of teaching Children's Rights, introduction of Children's Rights at various levels of the educational system, information campaigns, materials production.



- <u>Family Life Education</u>: setting up of national programmes, production of resource and teaching materials, identification of partners and resources.
- <u>Early childhood services</u>: identification of national partners and resources, strengthening services for young children including disabled and marginalised children, support for integrated and multidisciplinary services.

#### General objectives of UNESCO's early childhood initiatives

To support and strengthen the work of staff and personnel concerned with the well being and welfare of young children (from birth to 8), by:

- focusing efforts on early child development and education, family education, and the mobilization of both modern and traditional resources to improve children's development and well-being, increase their health, self-esteem and learning capacities and improve the skills of families and communities.
- sponsoring regional seminars and training sessions so that national teams can compare experiences and practices, and find ways to make them evolve.
- encouraging the development of innovative, alternative solutions well adapted to the needs of children and the life conditions of families.
- designing training modules for initial and refresher training courses on different topics related to early childhood.
- promoting reflection and information exchange on young children and families, through surveys on the state of early childhood and national inventories of early childhood resources.
- encouraging the development of early childhood networks at national and regional levels.

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#### The Center for Child Well-Being

The Center for Child Well-Being is a program of The Task Force for Child Survival and Development, an organization that works in the United States and internationally to improve the health and human development of children and families. From its inception in 1999, the Center for Child Well-being has looked beyond improvements in physical health to envision a world in which all children have the supports, strengths, and opportunities they need to flourish in every aspect of life - physically, cognitively, socially, and emotionally.

#### Three courses of action

Striving to achieve this vision, the Center focuses on three courses of action:

- 1. building the knowledge base to define and identify ways to impact child well being:
- 2. delivering information and assistance to parents and those people and organizations that influence the development of children; and
- 3. galvanizing social and political support for actively and effectively addressing children's needs today and in the future.

In all of its efforts, the Center collaborates with other child-focused organizations to emphasize the importance of identifying, understanding, and measuring positive child development.

#### Six principles for action

Six principles provide the framework for all activities of the Center. As we plan and carry forward the articulation of a dream for all children, we strive to be:

Collaborative: No one group or discipline can accomplish this vision alone. This work requires the participation and collective knowledge of children and parents, national and local groups, both public and private, in many areas, such as education, early childhood development, health, psychology, social services, faith communities, civic groups, and many others.

#### Positive:

The Center embraces a strength-based model for child health and development. Many organizations that are working in risk areas incorporate strengths into their prevention models, such as the development of self-worth, trust, attachment to positive role models, creativity, or habits to promote physical health among children. The work of the Center is designed to help increase the momentum toward developing positive capabilities, thereby promoting the health and well-being that buffers risks and may prevent problems.

Evidence-based: Using science and the evidence resulting from practice to support the needs of program and policy development is key in the Center's work. Knowledge about what works to foster the well-being of children comes from many disciplines. Integrating this information will support families and others who support children in making sound decisions.



Developmental: Different positive characteristics are more or less influential throughout different stages across the life course. At various points in human development, one's sense of self and connectedness to others are more closely attuned to particular sets of skills, competencies, and activities. The Center recognizes the different expressions of well-being and contributions to it across development and seeks to work with multiple partners whose combined interests can encompass all stages of human development.

#### **Ecological:**

The Center's work recognizes the interactions among parents, children, caregivers, community, and the environment that shape children's well-being. One task of the Center is to integrate what is known about children's unique, inherent capabilities and these interactions.

#### Universal:

The Center is committed to ensuring that all people have equal access to opportunities and supports for their children's development. We seek to eliminate disparities that may be attributable to such differences as race or ethnicity, gender, education or income, disability, age, sexual orientation, or geographic location. This principle recognizes and accepts the value of cultural diversity and the call to social justice. Our work must help those who are in greatest need while being broadly inclusive.

#### Further enquiries

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## Contents

F	o	re	W	O1	rd

I. Introduction	9
II. Identifying the Elements of Child Well-Being	10
1. Definitions	11
2. The Problem-Prevention Approach	11
3. The Strengths-Based Approach	12
III. Literature Review	12
IV. Construction of a Book	13
1. Elements of Physical Well-Being	13
2. Social-Emotional Well-Being	16
3. Cognition and Well-Being	21
4. Challenges to Advancing Child Well-Being	25
V. The Scientific Implications and Next Steps	26
1. Science and Governing Framework	27
2. Enhancing Indicators of Well-Being	27
3. Building a Directory of Indicators	29
4. A Registry for Interventions	30
5. Development of a National Index of Well-Being	31
6. Establishing the Parenting Network	32
VI. The Future of Child Well-Being	32
1. A Strategic Plan to Advance Child Well-Being and Benefits of a Plan	33
2. An Alliance of Child Well-Being Partners	34
References	35



#### Foundations of Child Well-Being

#### I. Introduction

We have not inherited this land from our ancestors; rather we have borrowed it from our children. -- Kenyan Proverb

In rearing our children, either directly as parents or collectively as a society and culture, we inhabit a territory that borrows their future. How we hold that future in trust and support its unfolding becomes the sustenance for our own global present and future. The well-being of children and investment in their early care and development becomes an investment from precious borrowed capital.

The Center for Child Well-Being, a program of the Task Force for Child Survival and Development supported by the Robert Wood Johnson Foundation, shares a vision of all children having the supports, strengths, and opportunities they need to grow and experience full lives, right from the beginning. These foundations of well-being would help children develop satisfying relationships, optimal health, lifelong learning abilities, social responsibility, and purposefulness. Well-being across the life course is a vision to be brought to reality through the efforts of all those engaged in children's early care and development.

Part of articulating this vision comes in identifying the foundational strengths that children should have in order to thrive, the interrelatedness of these strengths, and the contexts in which they are fostered. Such articulation helps move knowledge into action and provides a framework to galvanize community investment in the policies and works that support child well-being. Like child health and development, well-being does not automatically unfold and flourish as the child gets older.

This monograph looks at children's well-being holistically, integrating physical, cognitive, and social-emotional dimensions, and bridges child well-being with a developmental perspective across the life course. It describes foundational strengths for well-being —capacities that can be actively developed, supported, or learned. These foundational strengths — such as problem solving, emotional regulation, and physical safety — are the positive underpinnings of early child health and development and of ongoing well-being across the life course.

Through UNESCO, many people have come to appreciate the significance of early childhood development and child well-being in determining the holistic well-being of society. Making child well-being a priority can help break the inter-generational cycle of poverty and create the social capital to advance civil society. From this awareness, the Center for Child Well-Being (Center) was formed in 1999 with support from The Robert Wood Johnson Foundation to explore ways to improve the lives of children. The Center began an in-depth assessment of the science and practice of what we believed to be the next frontier of children's wellness: a focus on developing strengths from birth throughout childhood and adolescence, which would nurture a child's ability to thrive in all aspects of life -- physically, cognitively, and socio-emotionally.

Our efforts over the past three years in developing a knowledge base, tools and products have focused on four key questions:

- 1. What are the central elements of child well-being the fundamental strengths that support children's early health and development and sustain well-being throughout the life course?
- 2. What characteristics of child-serving environments support improvements in children's daily lives?



- 3. How can individuals and organizations partner for collective leadership and action to improve child well-being?
- 4. How can information about child well-being best be used to support decision making and action by the adults entrusted with children's care and development?

The Center's work to provide tools and build capacity among stakeholders has been directed towards three principal sectors devoted to children: parents and caregivers, the organizations that serve them, and the scientific community, whose work informs policy and practice. The book and this monograph, built upon its contents, represent beginning approaches to the four key questions. This monograph also describes several existing and proposed tools to serve the three sectors. For example, the Center's well-being book reaches a scientific audience; while it's parenting network is developing products for parents to use everyday. A directory of indicators and registry of interventions would serve organizations as they plan programming for children.

We gathered experts from many fields including psychology, education, sociology, child development, and medicine to consider these questions. Focusing on the first question — the identification of the elements of well-being — over 50 professionals have worked together. Blending their respective disciplinary perspectives and expertise, they prepared analytic reviews of key positive capacities for well-being. The Center used an experts' work group meeting and discussion groups at a larger conference to support the refinement of the written reviews. The revised summaries became chapters for the book titled, "Well-Being: Positive Development Across the Life Course" (scheduled to be published in Spring 2002).

For clarity of presentation in a much shorter format, this monograph is structured to identify the elements of child well-being and then review the literature. Next, we describe foundational elements in physical, socio-emotional, and cognitive well-being and their interrelationships. With the elements in mind, we discuss scientific implications and next steps in their application to child health and development and conclude with recommendations for the future of child well-being.

We look forward as a Center to continuing to address these questions with readers and partners across the nation and around the world. Our thanks to UNESCO for the opportunity that this monograph affords to extend our shared commitment to children in knowledge and action.

## II. Identifying the Elements of Child Well-Being

We have adopted the following formal definition of well-being:

Well-being is a state of successful performance throughout the life course integrating physical, cognitive, and social-emotional function that results in productive activities deemed significant by one's cultural community, fulfilling social relationships, and the ability to transcend moderate psychosocial and environmental problems. Well-being also has a subjective dimension in the sense of satisfaction associated with fulfilling one's potential<sup>1</sup>.

This definition takes a positive, ecological approach and encompasses developmental stages across the life course. We further acknowledge that the expression of well-being, its subjective experience, and the elements that under gird well-being, all exist in a particular cultural context. The knowledge base we are drawing on for the majority of our work was written to refer to Western populations (Pollard & Rosenberg, in press) and we are interested in hearing from colleagues about the cross-cultural implications.

<sup>&</sup>lt;sup>1</sup> The Surgeon General's (1999) definition of mental health and Thomas Weisner's (1998) definition of well-being both contributed aspects to our definition.



10 : 11

The term "element" is used to represent the foundational strengths contributing to an individual's well-being in the physical, social and emotional, and cognitive domains. Although identifying foundational elements of well-being, their functions, and mutual interactions is an extraordinarily complex and incomplete task, foundational elements can serve to anchor a vision and strategic plan. The Center for Child Well-Being, UNESCO, and many other organizations and people interested in the well-being of children share a vision of all children having the supports, strengths, and opportunities they need to grow and experience fulfilling lives. Actions that promote a strengths-based developmental path would help children during the critical formation of intelligence, personality, and social behavior. This early period has lifelong effects.

The expression "foundational element of well-being" implies a factor that is a fundamental precursor to higher order aspects of well-being across the life course. Elements are characteristics or capacities that stand on their own; they are not derived from blended components. Attention to the actions and conditions that support a foundational element can be expected to benefit children in the here and now as well as transfer a beneficial effect for well-being more broadly across the life course.

#### 1. Definitions

Foundational elements of well-being have been operationally defined as

Clusters of positive behaviors, skills, capacities, and/or characteristics that can

- promote the health and adaptive functioning necessary for well-being,
- prevent or mitigate illness and dysfunction that would diminish wellbeing, and
- be nurtured within the ecology of genetic and environmental influences.

Our focus is on the promotion of elements or strengths and the prevention of problems, integrating children's cognitive and psychological development as well as their physical health. We aim to advance children's health and development by identifying, describing, and organizing strengths of well-being. We hope that this work will direct attention to the importance of fostering developmental well-being in children and ensuring continued health and welfare across the life course.

"Health," according to the World Health Organization, "is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity" (World Health Organization, 1978). However, most people when they think about health think about illness. Most efforts have focused on children's disorders, disabilities, and deficits (Pollard & Lee, 2001). This project by the Center for Child Well-Being is an effort to begin to integrate and consolidate what we know about children's strengths, assets, and competencies. To focus on promoting developmental strengths, we need a clear idea of what those strengths are. We need to know what we are aiming for.

Another way to put it is to say that we need to "begin with the end in mind" - a mindset we do not usually take when parenting and caring for children. But, by focusing attention on the end that we have in mind, we can identify elements to nurture as the children grow. A strengths-based approach focuses on cultivating children's assets, positive relationships, morals, and capacities that give them the resources they need to grow successfully across the life course.

## 2. The Problem-Prevention Approach

With a problem-prevention approach, the focus on action typically begins close to when these problems actually occur or begin to emerge. This approach has the advantage of



being able to address problems with a prevention program delivered close in time to when children are at greatest risk for developing these problems. As a result, program results can be measured within a relatively brief period of follow-up time to assess whether the program had an impact during the time of maximal risk. Programs for older children and adolescents can have measurable outcome data available relatively soon after the program is initiated. For example, if you want to start a program to prevent violence in teens, you might start the program with children aged 12 and would be able to measure the results at age 17. Thus, you might have measurable outcomes within five years.

Prevention programs are typically easier to evaluate because measures and data sets containing indicators of problems are abundant. In addition, by identifying risk factors and selecting a group of children who demonstrate these risk factors, children who are at greatest risk can be selected for intervention and thus program resources are concentrated on the children most likely to demonstrate the problems. It has also been demonstrated that early targeting of risk factors can improve success in prevention. Some problems, such as smoking, alcohol abuse, and violence, share common risk factors, so prevention programs can sometimes target the same high-risk population and be able to impact multiple outcomes simultaneously. Finally, political support and popular attention tend to gravitate towards problem-focused approaches.

#### 3. The Strengths-Based Approach

When a strengths-based approach is used, strengths can be described across the life course and precursors to those strengths defined in age-specific terms. These precursors can be identified and used to measure outcomes beginning at birth, outcomes that occur much earlier than most prevention programs begin. In fact, parents can begin to think about strengths, and perhaps even influence some of them, beginning at conception. Strengths can be promoted at any age. Neuroscience suggests that early developmental influences are critical to the development of strengths. In addition, strengths can and do emerge, even when they are not explicitly named or cultivated.

Strengths also provide some measure of protection against problems, although much work remains to be done to measure this effect on specific problems of childhood. Strengths-based programs usually take longer to carry out because they begin at or before birth and, to attain their optimal impact, usually need to be maintained through adolescence. Thus, a strengths-based approach will require a longer period of time from program initiation to the measurement of results. This is part of the explanation for why it is usually harder to get popular and political attention for strengths than it is to get attention for problems. Finally, it is difficult to evaluate strengths-based programs because there are, as of yet, fewer indicators and data sets that measure children's strengths.

#### III. Literature Review

As a first step in building the foundation for a knowledge base, a systematic review of the literature was conducted to assess the current state of child well-being research (Pollard & Lee, 2001). This review updated and expanded an earlier systematic literature review spanning 1974 to 1992 (Toles et al., 1992). The review extended our understanding of child well-being to include current definitions of well-being, indicators of well-being, and instruments used to measure these indicators, thus contributing to a more integrated understanding of the state of the well-being research base.

The well-being literature base spanned the following domains: physical, social and emotional, cognitive, and economic. Indicators for each domain were grouped into deficit and positive clusters. The review revealed that well-being has been defined by positive individual characteristics, such as happiness, and on a continuum from positive to negative, such as how one might measure self-esteem. Well-being has also been defined in terms of an individual's context, such as standard of living. It is frequently



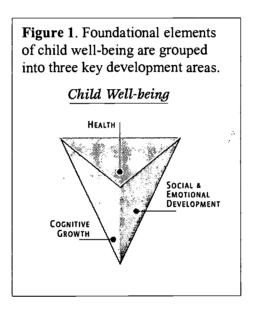
12

defined by the absence of illness, disease or a condition, such as the absence of depression, and also defined in a collective manner (e.g., shared understanding).

This audit showed that the definitions, indicators, and measures of well-being are highly variable and often do not use a strength-based perspective. There is a clear need for a consistent vocabulary and framework that spans a wide range of disciplines, age groups, cultures, communities, and environments in which well-being has been studied. Child well-being is more than the absence of problems; yet, a core set of positive indicators has not been determined to track strengths.

#### IV. Construction of a Book

The Center sought a more comprehensive way to present the spectrum of foundational elements of well-being for readers and moved to bring out a book and this monograph. The book's editors grouped the many elements into three key development areas, physical health, social-emotional, and cognitive, and then selected core elements that had a supporting empirical base. (See Figure 1) We could not be exhaustive in selecting the core strengths of well-being. The list of core strengths does not represent everything needed for healthy development. Additionally, we acknowledge that many variables, including genetics, biology, the environment and individual experience, contribute to the development of well-being.



For each foundational element of well-being identified, Table 1, Table 2, and Table 3 provide a definition, existing measures, and a summary of what supports or promotes the element. The tables, following the structure of the book, group the elements within three domains.

## 1. Elements of Physical Well-Being

Good nutrition, preventive health care, physical activity, safety and security, substance abuse prevention, and reproductive health are key components of physical well-being that children need to survive and thrive. Infants and young children are completely dependent upon parents and caregivers to achieve physical well-being. Over time, more responsibility shifts to the maturing child, as they transition from dependence upon parents and caregivers to making autonomous decisions about their own health and safety. Successfully achieving positive physical development in the early years is



critical. Infants and young children undergo a period of rapid growth during the first five years that has a profound impact on both current and subsequent development.

Two additional factors play an important role in the development of physical well-being in children. First, due to the immaturity of young children's immune system, they are more at risk for developing infection and disease. Moreover, young children are more susceptible to harm, which can compromise their physical well-being. Therefore, the first five years are a vital period for parents and caregivers to promote physical well-being in children and gradually teach children the importance of maintaining these behaviors themselves (Rogers & Leavitt, in press). Throughout middle childhood and into adolescence, parents and caregivers transition from being completely responsible for their children's health and safety to the children assuming greater responsibility in promoting their own physical well-being. The developmental process culminates when adolescents are able to make their own choices (with adult supervision) and are active participants in sustaining their own physical well-being.

An extensive literature review in addition to a consensus building process with experts in the field identified the elements of physical well-being. Six elements --nutrition, preventive health care, physical activity, safety and security, substance abuse prevention, and reproductive health -- were selected for their significant short- and long-term impacts on health, development, and well-being. (See Table 1) These elements of physical well-being also contribute to both the social-emotional development and the cognitive development of children. In short, every child can benefit physically, emotionally, and cognitively from the promotion of these elements of physical well-being (Rogers & Leavitt, in press).

Children's physical well-being is, of course, affected by the contexts in which they live. Many factors including the family's and societal system's values, community security, availability and accessibility of a public health system, institutional practices, environmental quality, accessibility of basic services, and economic considerations affect children's physical well-being (Rogers & Leavitt, in press). Based on this information, it is imperative to consider the entire context in which children live to ensure that their physical well-being is supported and nurtured.

Table 1. Physical Elements of Child Well-Being

Element & Author(s)	Definition	Existing Measures	Supports
The Importance of Physical Well- being and Its Impact on Well- being and Development  Rogers, M. F. & Leavitt, C. H. (In press)	Physical well-being is defined as including good nutrition, preventive healthcare, physical activity, safety and security, substance abuse prevention, and reproductive health.	Physical well-being is measured in a variety of ways including the monitoring of dietary intake, measuring energy expended during physical activity, self-report surveys about drug use, sexual activity, dietary intake, and amount of physical activity in which a child participates. Other forms of measurement include assessing the availability of quality healthcare, the access to information and resources that promote physical well-being, and adequate guidelines for when to administer care to children.	Physical health is primarily influenced by the child's environment including several systems as identified by Bronfenbrenner (1979, 1986, 1994). These systems include the microsystem, which is composed of parents, siblings, teachers, and peer; the mesosystem, which is the interaction between Microsystems; the exosystem; which is the linking of two or more settings; the macrosystem, which includes culture and society; and the chronosystem which refers to the overall environment the child in which the child is raised. For example, whether the child is being raised in a time of economic prosperity, a time of war, or a time of great medical advances. Each of these systems has an impact on the physical development of the child.



Element & Author(s)	Definition	Existing Measures	Supports
Nutrition  Leavitt, C. H., & Tonniges, T. F. (In press)	Consuming an adequate amount of essential vitamins and nutrients necessary for healthy physical, cognitive, and socioemotional growth and development.	Measured through: Assessment of dietary intake, taking anthropometric measurements, determining nutrient levels in blood samples, and through surveys and paper/pencil assessments.	Maternal nutrition during pregnancy, breastfeeding, and school breakfast programs all promote good nutrition in children. In addition, the Food Guide Pyramid developed by the USDA for children over the age of two offers helpful information.
Preventive Health Care  Tonniges, T. F., & Leavitt, C. H. (In press)	The means through which parents and healthcare providers can collaborate to ensure that young children receive a healthy start to life as well as promote preventive healthcare throughout the lifespan. The important elements of preventive health include newborn screening, sleep and infant positioning, immunizations, and hearing and vision screening (American Academy of Pediatrics [AAP] Committee on Practice and Ambulatory Medicine, 2000).	Until recently, this element has been guided by expert opinion. The American Academy of Pediatrics (AAP) developed the "Periodicity Schedule" which provides physicians with expert knowledge, guidelines, & timelines for administering the best care to children in 2000 (AAP Committee on Practice and Ambulatory Medicine, 2000).	Family awareness and attitude, professional responsibility and effort, community involvement, and systemic issues. Development of the "Medical Home" model which addresses the basic needs of children, adults, and families (American Academy of Pediatrics [AAP], 1992). "This model embodies the classical primary healthcare model, however, also recognizes the very significant role and responsibility of the family and the healthcare professionals in providing comprehensive, community-based, coordinated care that is compassionate and culturally effective" (Tonniges & Leavitt, in press).
Physical Activity  Conner, J. M.  (In press)	Physical activity is operationally defined as a positive state of physical health, encompassing normal growth and development and physical activity or functioning level.	Physical activity is measured by determining basal energy expenditure (Wong, et al., 1999), measuring total daily energy expenditure (Spurr & Reina, 1987; Wong et al., 1999), measuring amount of energy expended during activity, assessing the number of physical activity events or the duration of physical activity per week, and/or evaluating the percentage of time spent engaging in physical activity events per time period.	Parents play an important role by modeling physical activity for their children, and creating a home environment in which computer, television, and video game use are kept to a minimum. Schools can also contribute to the promotion of this element by making physical education a priority and devoting classroom time to educating children about the importance of physical activity. Children's feelings of self-efficacy, competency, and behavioral control all indicate higher levels of physical activity (DiLorenzo, et al., 1998).
Physical Safety and Security  Sleet, D. A., & Mercy, J. A. (In press)	Having a present or immediate freedom from danger and harm. Also includes feeling secure in one's environment and being free from anxiety and apprehension of harm. Perceiving and avoiding unnecessary, dangerous risktaking behaviors.	Physical safety and security are measured by evaluating the number or percentage of children engaged in safe/unsafe behaviors. The number of potential outcomes suggesting safe/unsafe behaviors also measures safety and security.	Elimination or reduction of hazards and risks in the physical, social, and familial life of children. Programs that address developmental needs, remove barriers to meeting developmental milestones, and foster support for healthy development across a variety of ecological contexts are crucial to promoting safety and security (Williams, et al., 1997). Interventions such as individual behavioral change, family and parental change, and changes in exposure to hazardous products promote safety and security.

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Element & Author(s)	Definition	Existing Measures	Supports
Reproductive Health  Dewey, J. E., & Conner, J. (In press)	A state of physical, mental, and social well-being in all matters relating to the reproductive system at all stages of life (World Health Organization [WHO], 1994). Adolescents also need information that will allow them to make healthy decisions regarding their sexuality.	Reproductive health is measured by access to safe, effective, affordable, and acceptable methods of family planning, the right to appropriate health-care services, a satisfying and safe sex life and the freedom to make informed choices around if and when to reproduce (World Health Organization [WHO], 1994).	Families can serve as a support for the promotion of reproductive health through early teaching, and discussions with children about healthy sexual behaviors. Schoolbased programs that provide education that also focuses on decision-making, self-esteem, and skill building. Health-facility programs and outreach programs can also offer programs and services for adolescents. Social marketing, such as radio, television, billboards, newspapers, magazines and the Internet can also be a forum for offering information to adolescents.
Substance Abuse Prevention  Simons-Morton, B.G. & Haynie, D. L. (In press)	The prevention of the use of illicit drugs such as marijuana, cocaine, and heroin, as well as the use of alcohol and tobacco by adolescents in order to maintain a normal and positive developmental trajectory.	Drug use is typically measured by self-report, which tends to be fairly accurate. From self-reports, information such as type of drug, recency, age of initiation, frequency, amount, and population prevalence can be determined. Frequency assessments are often used to provide a continuous measure of use. Use can also be measured by bio-chemical verification, which tends to be reasonably accurate (Dolcini, Adler, & Ginsberg, 1996).	Parents who are nurturing, responsive, and encouraging at an early age (Shedler & Block, 1990) and in adolescence (Hansell & Mechanic, 1990; Baumrind, 1991; Simons-Morton, et al., 1999a, Simons-Morton et al., 2001). Close attachment to parents and participation in pro-social activities may be protective against this type of behavior (Eccles & Barber, 1999). Teens who have positive affiliation with their schools may be less likely to use drugs (McBride, et al., 1995; Simons-Morton, Crump, Saylor, & Haynie, 1999c).

## 2. Social and Emotional Well-Being

Social and emotional well-being encompasses multiple elements: the development of emotion understanding and regulation; the ability to cope with stressors; the development of autonomy and trust; the development of the self-system, including identity, self-concept, and self-esteem; the development of empathy and sympathy; and the formation of positive social relationships with parents, siblings, and peers. This group of elements included here is by no means exhaustive but represents a core set of essential strengths of social and emotional well-being as defined by the literature and experts in the field (Halle & Zaff, in press). (See Table 2)

A striking commonality between the elements of this domain is the influence that each has on the other and how each can be promoted by the others. For example, a child's ability to regulate his or her internal emotional reactions is a key contributor to the quality of relationships with parents, siblings, and peers. At the same time, loving and supportive relationships with parents, siblings and peers help to increase feelings of security and happiness and reduce the prevalence of psychological problems such as depression and anxiety. Thus, there is a multi-directional relationship between the child's emotional state and social interactions with others (Halle & Zaff, in press).



Another common theme of social-emotional well-being is that the elements of this domain can promote and be promoted by the core elements of both the cognitive and physical domain. For example, warm and responsive parenting styles promote the development of trust and autonomy, which foster feelings of security within the infant which in turn lead to increased exploration of his or her physical environment. Both motor and cognitive development are stimulated by this exploration (Halle & Zaff, in press).

Context also plays an important role in the development of the elements of social-emotional well-being. Book co-author, Tamara Halle, notes that emotional competence is related to the appropriate expression of emotion in particular situations. For example, children who laugh at the expense of others are judged to be less emotionally competent than children who do not laugh at others. Another example of the importance of context in the development of this domain, provided by co-author Lisa Bridges, is that there are different coping mechanisms which are appropriate for different situations. She states that no one coping mechanism can be used universally. Self-esteem is also thought to be specific to a particular context such as academic, interpersonal, or athletic (Halle & Zaff, in press).

The importance of biological factors cannot be ignored when looking at the development and manifestation of social and emotional elements of well-being. At the same time, many authors recognize that social contexts trigger the expression of elements that have a biological basis (Halle & Zaff, in press). Thus, the interaction of biological processes and social contexts determine the development of social and emotional well-being.

Each of the elements in the social-emotional domain can be promoted through various interventions. More specifically, social and emotional well-being can be promoted by individual characteristics, interpersonal relationships, and environmental factors. Some of these factors are more malleable than others and the more flexible the promotional factor, the more likely that factor is to be a target for intervention (Halle & Zaff, in press).

It should be noted that the majority of research conducted in the area of social and emotional development generally takes a Western/Eurocentric perspective. The findings regarding positive outcomes and the maintenance of social and emotional well-being are based on Western culture and, more specifically, individualistic and capitalistic ideologies. Moreover, even in the United States, differences exists between socio-cultural and ethnic groups. Typically, the extant literature does not take these differences into account. Different ethnic groups as well as males and females place value on different outcomes. Behaviors that one group may define as positive social-emotional development, may been seen differently by another group. For instance, females have been shown to place more emphasis on interpersonal relationships than males and African American communities tend to place more emphasis on communalism, regardless of gender (Halle & Zaff, in press).



Table 2. Social and Emotional Elements of Child Well-Being

Element & Author(s)	Definition	Existing Measures	Supports
Social and Emotional Well- being: An Overview  Halle, T. G. & Zaff, J. F. (In press)	Social and emotional well-being is defined as emotional regulation, well developed coping mechanisms, the development of autonomy and trust, the development of self-esteem, identity, and self-concept, the development of empathy and sympathy, and lastly, the formation of positive relationships with family and peers.	Emotional regulation can be measured by assessing physiological processes such as heart rate vagal tone, and the autonomic nervous system. Vagal tone is a measure of the influence of the parasympathetic nervous system on the heart. Other measures of this element include paper/pencil surveys and assessments, naturalistic observation techniques. For example, autonomy can be measured by observing a child's comfort with exploration. Many times parents are asked to rate their child's emotional development through written surveys such as Infant-Toddler Social and Emotional Assessment. Additionally, subscales of comprehensive developmental instruments such as Personal-Social Domain of the Battelle Developmental Inventory and the Behavior Rating Scale of the Bayley Scales of Infant Development can be used to assess the development of the social-emotional development of children.	A warm and responsive relationship between parent and child appears to foster social and emotional development. The quality of the attachment between child and caregiver is associated not only with emotional development, but also physical and cognitive development as well. Positive social relationships are also important for the development of this element it that it allows children to develop the ability to understand how another person is feeling or thinking. Engaging in physical activities also promotes healthy social and emotional development.  Other important factors include temperament of the child, personality traits, and cognitive abilities.
Emotional Development  Halle, T. G. (In press)	A number of definitions of emotions exist and have been defined as: states of automatic arousal (Schachter & Singer, 1962); as attitudes (Bull, 1951); as mechanisms that control shifts in goal states or motivations to act (Frijda, 1986; Lang, 1995); as affective reactions preceding and/or lacking perceptual and cognitive encoding (Zajonc, 1980); and as cognitive appraisals of social events (Lazarus, 1991). All researchers agree that there are three essential components: physiological responses, subjective experience, & observable behaviors (Frijda, 1999).	Most work on measurement of emotions has been done on adults and looks at the reduction of negative emotions such as depression. A shift has taken place and researchers are beginning to focus on positive emotions. Emotions are primarily measured through paper/pencil surveys and assessments as well as naturalistic observational methods	Promotion of positive affect can take place through techniques such as mood induction. The typical mood induction technique often used with children is a visualization task, where children are asked to think of an event that makes them feel happy or sad (Yasutake & Bryan, 1995). Parents can also promote emotional understanding by responding to infants' emotional expression and by modeling emotional expressiveness (Denham & Grout, 1992; Wilson & Gottman, 1995) and talking about emotions (Denham & Auerbach, 1995; Dunn & Brown, 1994). The quality of the parent-child relationship is also important for emotional development (Laible & Thompson, 1998). A warm and secure relationship seems to promote emotional understanding. Emotional regulation is promoted by cognitive development (Rothbart & Posner, 1985) and parent-child attachment (Cassidy, 1994)



Element & Author(s)	Definition	Existing Measures	Supports
Emotional Regulation  Graziano, W. G. & Tobin, R. M. (In press)	Consists of the extrinsic and intrinsic processes responsible for monitoring, evaluating, and modifying emotional reactions.	Emotions have been measured through physiological monitoring of vagal tone (Porges, 1991) and electroencephalography (Fox, Schmidt, Calkins, Rubin, & Coplan, 1996). Vagal tone is an index of the influence of the parasympathetic nervous system on the heart. Other measures involve parental reports such as the Infant-Toddler Social and Emotional Assessment (Carter & Briggs-Gowan, 1993) and the Infant Behavior Questionnaire (Rothbart & Derryberry, 1981). Behavioral/Observational methods are also used to measure emotional regulation.	The quality of the parent-child relationship is an important factor involved in the promotion of this element. More specifically, the quality of attachment between parent and child and the parental response when the child is distressed are determinative of whether this element will be promoted in children. Additionally, the child's engagement in pretend play, the child's language acquisition and conversational ability, and the quality of and access to peer group interactions also play an important role in promotion this element.
Coping Bridges, L. J. (In press)	Involves cognitive and behavioral flexibility in the face of environmental demands that cause stress to the internal and external resources of the individual (Lazarus & Folkman, 1984).	Interviews, checklists, and questionnaires that inquire about the number of strategies an individual possesses for coping with a perceived stressful situation. Measures such as Kidcope (Spirito, Stark, & Williams, 1988) and Self-Report Coping Scale (Causey & Dubow, 1992) are also used.	Development of sociability, positive affectivity, high intelligence and physical attractiveness. Maternal support and low levels of structure as well as nurturant caregivers who model positive coping styles to their children and physical environments that allow children to perceive themselves as being in control facilitate coping skills.
Autonomy Bridges, L. J. (In press)	The ability to self-govern one's daily activities and thoughts, self-motivate one's behaviors, conduct independent exploration of one's environment and self-regulate one's emotions.	Research Assessment Package for Schools-Student Self Report (Connell & Wellborn, 1991) and observational methods that examine persistence and focused exploration.	Environment and parenting styles that allow children to act on their environment and experience competency fosters autonomy.  Maternal stimulation, responsive caregivers, and a maternal style that promotes autonomy rather than being over restrictive support the promotion of this element.
Trust & Attachment  Bridges, L. J. (In press)	The ability to have a secure attachment to one or more caretakers or important individuals in one's life. The quality of the attachment between child and caregiver can be determined by "observing the tendencies of infants and toddlers to seek and obtain comfort from their caregivers when they are distressed versus the tendency to avoid or resist interactions with caregivers and the ability of infants and toddlers to use their caregivers as 'secure bases' from which to explore the environment during periods of low stress" (Bridges, in press).	Observational and interview methods: Strange Situation (Ainsworth, et al., 1978), Paper/pencil assessments: Attachment Q-set (Waters & Deane, 1985; Waters, Vaughn, Posada, & Kondo-Ikemura, 1995), the Inventory of Parent and Peer Attachment (Armsden & Greenberg, 1987), Research Assessment Battery for Students (Institute for Research and Reform in Education, 1998).	The quality of the relationship between the child and his/her caregiver(s). Parenting traits that promote trust include: consistency, contingency, appropriateness, positive affectivity (Ainsworth, et al., 1978), and low levels of marital conflict (e.g., Belsky & Isabella, 1988).



Element & Author(s)	Definition	Existing Measures	Supports
Parent-child Relationships  Cox, M. J. & Harter, K. S. M. (In press)	The way in which parents are able to regulate their parenting behavior in interaction with their child based on the child's developmental needs. It is important to note that the parent-child relationship is cocreated by both the parents and the children; it is not simply behaviors coming from the parent.	The quality of parent-child relationships are measured through self-report assessments, questionnaires, and direct observational methods.	Family configuration, social support, social class, and culture are all related to the quality of parent-child relationships (Bornstein, 1995; McLloyd, 1998). Strong social support systems are associated with improved parent-child relationships. Mothers with higher level of education and incomes appear to be more sensitive to the signals their young children send (NICHD Early Child Care Research Network, 1999a). Infant temperament and parental personality impact parent-child relationship.
Sibling Relationships  Volling, B. L. (In press)	Sibling relationships include four dimensions: warmth/closeness, conflict, rivalry, relative status/power (Furman & Buhrmester, 1985).	Sibling relationships are primarily measured through paper/pencil assessment including the Sibling Relationship Questionnaire (SRQ) developed by Furman and Buhrmester (1985).	Quality of marital relationship and the children's relationships with each parent are important factors for determining the quality of sibling relationships. Individual characteristics of the parents also impact the sibling relationship (Brody, 1998). Warm and nurturing mothers and paternal positivity and warmth seem to be associated with close sibling relationships (Brody, et al., 1992).
<u>Peer</u> <u>Relationships</u> Bukowski, W. M. (In press)	A relationship with a co-equal that provides essential socialization experiences that are necessary for the acquisition of several fundamental skills, for healthy personality development, and for psychosocial adjustment.	Measurement of peer relationships involves rating scale measures of acceptance, rejection, social preference, popularity, and friendship.	The development of peer relationships is promoted by a number of factors which can be broken down into three levels of complexity: the individual, the dyad, and the group (Rubin, Bukowski, & Parker, 1998). Individual differences in children, such as perceived competence can promote peer relationships. The quality of interactions and the stability of the relationship have an affect the peer relationship as well.
Positive Development of Self  Zaff, J. F. & Hair, E.C. (In press)	The Self is defined as being comprised of three components: self-concept, self-esteem, and identity. Self-concept is defined as the sum of an individual's beliefs about their own attributes such as their personality traits, cognitive schemas, and their social roles and relationships (Franzoi, 1996). Identity is a commitment to one's self-concept. Self-esteem is how the individual perceives his/her self concept and identity.	The most commonly used instrument for measuring self-concept/self-esteem are self-report inventories such as the Self-perception Profile for Children (SPPC) and the Self-Description Questionnaire II (SDQII). Projective tests such as the Rorshach and the Thematic Apperception Test (TAT) are also used peripherally (Wylie, 1989). To measure ego identity, researchers use instruments such as the Identity Status Interview (ISI), the Objective Measure of Ego Identity (OM-EIS) and the Extended Objective Measure of Ego Identity Status (EOM-EIS) (Grotevant & Adams, 1984). Instruments for measuring social and ethnic identity are also used.	Perceived support from significant others. In young children, parental approval promotes self-esteem. The approval of classmates appears to be very important for adolescent's development of self-esteem. The majority of research has been done on ethnic identity. Stronger ethnic socialization seems to lead to stronger feelings of pride attachment to one's ethnic group.



Element & Author(s)	Definition	Existing Measures	Supports
Prosocial Behavior, Empathy, & Sympathy  Eisenberg, N. (In press)	Prosocial behaviors include a wide range of actions, the results of which are intended to benefit others. Empathy is defined as the identification with and understanding of another person's situation, feelings, and motives. Sympathy is defined as the ability to share, with another person, emotions about a particular situation or occurrence.	Prosocial and altruistic behaviors are measured in a variety of ways including self-reports, other-report and observational methodology. Observational methods also include monitoring the physiological reactions to others who are in distress (Losoya & Eisenberg, in press).	Heredity, temperament, sociocognitive development and socialization can all promote the development of prosocial behaviors. More specifically, temperamentally well-regulated children tend to be prosocial. Authoritative parenting appears to promote the development of prosocial behaviors. Modeling of prosocial behaviors and opportunities for prosocial behaviors are also important in the development of this element.

#### 3. Cognition and Well-Being

"Cognition refers to the processes of perceiving, remembering, conceiving, judging, and reasoning in order to obtain and use knowledge, and communication refers to skills that permit the exchange of thoughts, wishes, and feelings so necessary to developing and maintaining social relationships with others" (Bornstein & Smith, in press). These skills are essential for adaptation to one's environment, maintenance of health, and participating in productive activities that will improve social and environmental interactions. Nine key elements of cognitive well-being in childhood are identified in the book. (See Table 3) While this list is not exhaustive, a review of literature and discussions with professionals yielded these elements as representative of a critical core (Bornstein & Smith, in press).

From infancy, cognitive structures develop which allow children to assimilate information from their environment with greater proficiency. Simultaneously, children are acquiring communication skills that enable them to understand and speak in sentences, reason with and think about language, understand pragmatics, and become literate. All of these skills lead to effective use of cognitions. These cognitive and language abilities are basic skills for later success in school, positive social interactions, and future employability. While it is the responsibility of educators to teach these cognitive skills, children must have the cognitive and communication skills that are necessary precursors for learning to read, write and perform mathematical operations when they begin school. Understanding what is heard and read are life-long skills that are imperative to future social and educational success (Bornstein & Smith, in press).

Cognitive abilities include mental capacities commonly referred to as intelligence. While there are diverse definitions of intelligence, surveys of professionals indicate that abstract thinking or reasoning, the capacity to acquire knowledge, and problem solving are key. Other skills that are rated as important components of intelligence and cognition include creativity, general knowledge, linguistic and mathematical competence, memory, mental speed, and adaptation (Bornstein & Smith, in press).

The cognitive elements share several common themes. Many of these elements are measured using paper-and-pencil and electronic tasks. Most are both reliable and valid, meaning that they are consistent and test what the measure is intended to test. Another common feature has to do with distributional characteristics of individual and group performance. This means that there is individual variation in elemental skills as well as group differences. For example, skills typically improve as children grow. Additionally, the elements show stability in that an individual who scores well at a young age is likely to score well as an adult. Furthermore, these elements of cognition link with one another as well as with other domains' elements of well-being. It is inferred that as cognitive elements develop and improve, overall well-being will also



improve. Consequently, it is important to acknowledge that the cognitive elements are dependent upon and can be positively impacted by the external influences to which a child is exposed (Bornstein & Smith, in press).

Just as was true for the research in the social and emotional domain, the literature on cognitive well-being had been developed in the absence of cultural and ethnic considerations. The primary sample for well-being research has been in European or European American groups where the large proportion of psychological and related studies of cognition have been conducted. We are not able to ascertain, based on this research base, how cognitive well-being is manifest across diverse cultures. It is logical to assume that some aspects of cognitive well-being are universal (e. g., information processing), where an individual who can process information more rapidly is more likely to succeed in an environment where computer applications dominate and therefore may be more likely to report well-being in this domain. However, culture and societal values must be taken into account when determining if a special talent necessarily leads to cognitive well-being. In short, it is important to pay attention to both objective measures of cognitive skills and subjective evaluations of those same skills to determine cognitive well-being (Bornstein & Smith, in press).

Table 3. Cognitive Elements of Child Well-Being

Element & Author(s)	Definition	Existing Measures	Supports
Cognition and Well-being: An Overview  Bornstein, M. H. & Smith, D. C. (In press)	Perceiving, remembering, conceiving, judging, and reasoning in order to obtain and use knowledge are all important cognitive skills. It is also very important for individuals to communicate their thoughts, feelings, and wishes in order to get their needs met. All of these cognitive skills are necessary for adaptation to the environment as well as the formation and maintenance of social relationships.	Many elements of cognitive well-being are measured by using paper-and-pencil assessments. The most common measures of intelligence are the Stanford-Binet IQ test and the Wechsler Intelligence Test for Children. Other measures of cognitive well-being include report cards, achievement tests, cause and effect toys, and puzzles are also used to assess this element.	Several environmental factors support healthy cognitive development. For example, environments where children are exposed to both artistic and intellectual stimulation seem to foster this type of development. Additionally, a balance between repetition and variety seems to help with cognitive development, especially memory, exploration, and novelty-seeking. Human interactions foster language development and strong attachment between caregiver and child promotes curiosity, goal persistence, motivation, problem solving, and intellectual development.
Information Processing and Memory  Kail, R. V. (In press)	Information processing approaches assume that human cognition consists of cognitive structures and organized sets of cognitive processes that allow people to complete specific tasks. Memory denotes a structure that includes ongoing cognitive processes and the ability to store and recall the information required for those processes.	The Cross Out task from the Woodcock-Johnson Test of Cognitive Ability is typically used general processing speed. This measure is timed, and the participant must identify the identical figures that are placed in rows with similar figures. Memory is measured using span tasks. These measures use digits, tasks, letters, or words that are presented to participant who must repeat them in order. The number of stimuli increases until the participants are no longer able to recall the sequence accurately. Complex span tasks can be used to measure working memory.	The promotion of information processing can be achieved when new information is presented slowly and when an individual is able to practice a task to the point of mastery. Environments in which information slowing, repetition, and practice are encouraged will help to promote this element. Similarly, memory can be promoted by creating environments in which a task is practiced to the point of mastery and by teaching individuals to use memory strategies such as remembering information in related chunks/acronyms, in order to reduce the influence of new information on the limited capacity of working memory.



Element &	Definition	Existing Measures	Supports
Author(s)  Curiosity, Exploration, and Novelty-seeking  Wentworth, N. & Witryol, S. L. (In press)	Curiosity is defined as the desire to learn more and includes two properties: the capacity to energize and the power to control its direction. Exploration is the behavior that results from curiosity. It can take many forms such as visual search and attention, object manipulation, concept formation, etc. The direction that curiosity and exploration take are related to novelty-seeking.	Haith's Visual Expectation paradigm, which involves showing infants pictures at two locations (usually left and right of visual center), is used to measure the infant's selective attention to novelty (Haith, Hazan, & Goodman, 1988).	Environments should be designed so that there is a balance between variety and structure. If an environment is too dynamic, it could overwhelm the child (Fagan, 1992). Children's past experiences and information processing capabilities must be taken into account when designing environment. Children with secure attachments to their caregivers are more likely to explore novel environments (e.g., van den Boom, 1994). Normal physical development also promotes curiosity and exploration.
Mastery Motivation & Goal Persistence  Jenning, K.D., & Dietz, L. J. (In press)	"Mastery motivation is an intrinsic desire to master one's environment, especially one's physical environment" (Jenning & Dietz, in press). This desire to master the environment is best assessed when external rewards are not present.	Solvable tasks such as puzzles, shape sorters, and cause-effect toys are used to assess aspects of mastery motivation. These aspects include: problem-solving and effectance. Persistence is the primary measure of motivation. Other aspects such as affect and sophistication of the task are noted during the task completion. Other measures such as impossible tasks, the Behavior Rating Scale, which is part of the Bayley Scales of Infant Development (1993), the Infant Behavior Record, observations of naturally-occurring play and questionnaires are also utilized for measuring mastery motivation.	Genetic and social factors play important roles in the promotion of mastery motivation. More specifically, the relationship with the primary caregiver and the environment to which the child is exposed. The quality of the attachment between caregiver and child can influence the development of mastery motivation. Children with secure attachments are more likely to show mastery motivation. The provision of a broad range of mastery opportunities and experiences promotes the development of mastery motivation.
Thinking and Intelligence Siegler, R.S. (In press)	Thinking involves both basic and high-level mental processes. Examples of basic processes include expressing oneself in language and perceiving objects and events in the external environment. Examples of high-level processes include solving problems, and reasoning, planning. Intelligence has more recently been defined as understanding of oneself and others, creativity, musical ability, and other non-prototypic forms of intelligence (Gardner, 1999; Sternberg, 1999).	Intelligence is typically measured through the use of standardized tests such as the Wechsler Intelligence Test for Children (WISC) and the Stanford-Binet IQ Test. The WISC measures several aspects of intelligence such as vocabulary, arithmetic, comprehension, and memory.	Genetic contributions and the interaction between children's genotypes and their environments play an important role in intelligence. The family environment can also influence intelligence. Children who are raised in environments that are high in quality, where parents offer intellectual stimulation, emotional support, and high levels of parent-child interactions are more likely to have higher IQ's (Bradley, 1994). Children who come from wealthier homes tend to score higher on IQ tests (Case, Griffin, & Kelly, 1999)



Element & Author(s)	Definition	Existing Measures	Supports
Problem Solving  Smith, D. C. (In press)	"Problem solving can be described as the use of a sequence of steps that attempt to identify and create alternate solutions for both cognitive and social problems. These steps include the ability to plan, resourcefully seek help from others, and think critically, creatively, and reflectively" (Smith, in press). Nezu & Perry (1989) state that in order for a person to be able to successfully engage in social problem solving, he or she must possess the ability to express his/her thoughts and feelings, recognize and predict cause and effect relationships, perceive and have empathy for another's perspective, engage in abstract, creative thinking, and have the belief that his/her actions can have a significant impact on the environment.	Several instruments exist for measuring problem solving skills. The Preschool Interpersonal Problem Solving (PIPS) is used to measure the ability to think of alternative solutions to real-life problems (Shure & Spivack, 1974). This test examines the number of different and relevant solutions that 4-year-olds generate when presented with age appropriate problems. Other instruments used to measure problem-solving skills include the What Happens Next Game and the Means-End Problem-Solving Test. Additional information about these measures can be found in Butler & Meichenbaum (1981).	The attachment or bond between parent and child appears to be an important factor in toddlers' confidence in solving easy problems and the enlistment of support when faced with more difficult problems (Matas, Arend, & Sroufe, 1978). Caregivers can influence the development of problem solving skills in a number of ways. For example, children around the age of two can identify the tasks that they can perform; caregiving behaviors that interfere with self-direction can impact the development of problem solving skills negatively. Parents can promote problem solving by interacting positively and supportively with and offering challenges to children during joint play.
Language & Literacy  MacWhinney, B., & Bornstein, M.  H.  (In press)	Language involves both productive and receptive use. The comprehension of words and sentences is receptive use and productive language use involves generating ideas and articulating words into speech. Language is composed of four basic components: phonology, semantics, grammar, and pragmatics.	The methods used to measure language are quite straightforward. The measures involve recording and transcribing what children say (MacWhinney, 2000), controlled experiments where children are asked to answer questions, repeat sentences, or make judgments regarding grammar. Parental reports are also used as sources of information for studying language.	The amount and diversity of input that children receive is one of the best predictors of a child's vocabulary development (Huttenlocher, et al., 1991).  Language skills are formed on the basis of parent-child interactions. In addition, exposure to many different supports such as teachers, peers, schools, and other organizations can promote language development in children. Children must speak to others and be spoken to in order to develop their language skills; therefore, television is not an adequate substitute for interactions.
Moral Development  Hart, D., Burock, D., London, B., & Miraglia, A. (In press)	Morality is defined as those characteristics of an individual's life that are reflective of the individual's sense of obligation and othercentered values. Moral development has three facets: moral judgment, moral emotions, and moral action.	Moral development is often measured using Kohlberg's (1984) five developmental stages of moral judgment which include: Heteronomous Morality, Instrumental Morality, Interpersonal Morality, Normative Morality, and Human Rights and Social Welfare Morality. Additionally, the Moral Behavior Scale and the Morally Debatable Behavior Scales are used.	Moral development can be promoted through the development of other personality traits such as ego-resiliency, emotional self-regulation, and adaptability. High quality parent-child moral discussions, parental expression of moral emotions, and parental modeling of prosocial behavior all contribute to moral development. Higher SES class and access to neighborhood resources such as sports teams may also contribute to moral development. Peer relationships that allow for joint exploration of moral issues and behavioral modeling also promote moral development (Kohlberg, 1984; Piaget, 1965).



Element & Author(s)	Definition	Existing Measures	Supports
Educational Achievement  Plank, S. B., & Mac Iver, D. J. (In press)	Educational achievement can be defined by identifying three areas: readiness to learn, achievement test scores, and report card grades. Readiness has been defined as the state in which the capacities and competencies of the child match the expectations and requirements of the adults and school in his or her life (Karweit, 1999a).	Educational achievement is typically measured through the use of achievement tests and report card grades. Achievement test scores include both standardized achievement tests as well as the curriculum-based tests given regularly in schools.	Parent-child interactions, socio- economic and demographic factors and educator attributes all impact the development of educational achievement. Higher parental education levels and smaller family size are positively correlated with student achievement in a non- Hispanic, White sample (Grissmer, Kirby, Berends, & Williamson, 1994). Public policies and public investment in education can have an impact on student achievement. Resources and educational opportunities within the home and the community can also promote educational achievement. In order to promote educational achievement, children must be offered consistent, coherent, and increasingly complex curriculum that builds on the previous year (Balfanz, Mac Iver, & Ryan, 1999).
Creativity and Talent Winner, E. (In press)	Creativity encompasses imagination, expressiveness, and originality in thought and action. Talented or "gifted" children have three characteristics: they pass milestones in their domain of ability at an earlier age than do typical children, they are intrinsically motivated and exhibit intense interest and an ability to focus their attention sharply, and they learn in qualitatively different ways from typical children.	Measurement of creativity is usually accomplished through paper/pencil assessments such as the Stanford-Binet IQ as well as other assessment tools such as the administration of insight problems and task commitment and creativity tests. Musical, artistic, leadership, and interpersonal talents can also be used to measure giftedness.	Development of creativity is dependent on the quality of the child's environment and the relationship with the primary caregiver. Gifted children typically grow up in enriched family environments with high levels of intellectual and/or artistic stimulation. Parents of gifted children typically model hard work and high achievements themselves (Bloom, 1985).

## 4. Challenges to Advancing Child Well-Being

Any substantive plan to improve early child development and well-being across the life course depends upon the answers that science and research can contribute to decision making in public policy and practice. Yet, the capacity of science to inform policy and practice is affected by many challenges that impact child well-being as a field of study. Some of these challenges are easily identifiable as "scientific" because they are matters of theory, research methodology, or information technology. Other challenges affect our ability to apply what can be learned through science. These applications are limited by:

- 1) the social will and resources that the public is willing to invest in children's well-being,
- 2) cultural assumptions about determinants of well-being and whether they can be changed, and
- 3) social disparities that limit access to resources for those whose physical, cognitive, and social-emotional capacities are less developed and reinforce access and availability for those whose capacities are already strong (Davidson, Moore & Rosenberg, in press).

A partial listing of challenges and alternate approaches is offered in Table 4.



Table 4. Challenges and approaches for advancing child well-being

Challenge	Alternative approach
Information about and interest in children is fragmented.	A more holistic consideration would help link scientific information and those interested in children.
Children are often viewed as a collection of problems or at-risk conditions.	Focus on a more strengths-based approach including foundational strengths of wellbeing can under gird success and happiness across the life course.
Some dimensions of child well-being are under appreciated areas (social and emotional development) that have a huge impact on more visible areas of interest (cognitive performance in school.)	Social and emotional development needs to be built into existing interventions.
Not all sectors of the community are attentive to child health and development.	Inclusiveness and the development of social will supporting child well-being depends upon engaging a broad base of stakeholders.
Decision-makers need an accessible evidence base of what works that communities can adapt to local circumstances.	Scientific synthesis could help communities build on success instead of starting from scratch, program by program.
Appropriate measures and indicators are unavailable for tracking some of the most important outcomes for child well-being.	A wider set of positive indicators would help decision makers understand the value of their investing in child well-being.
Strategic action to eliminate disparities in child health and development is hampered by inequitable resource allocation.	Scientific information about the relative costs and benefits of various choices can impact decisions about resources.

## IV. The Scientific Implications and Next Steps

Almost all scholarly research carries practical and political implications. Better that we should spell these out ourselves than leave that task to people with a vested interest in stressing only some of the implications and falsifying others. (Coontz, 1992)

As a social historian and scholar of the American family, Stephanie Coontz was particularly mindful of the duty that scientists and academicians have to include among their scholarly responsibilities, reflection and communication about the implications of their research. This concern for the practical and political implications of scientific



26

inquiry is never more critical than when one's focus is the well-being of children. Thoughtful program, policy, and systems-level actions require evaluation of multiple simultaneous and complex inputs. Good science that explores the well-being of children has much to say about public policy and practice developed on behalf of children around the world. Scientists who also consider the implications of gaps in current science and measurement can apply their understanding to advance sound social investments. Scientific knowledge is only one component in the applied decision making of policy and practice, but without the active engagement of scientists in the decision-making process, ideology may run the show.

This section highlights the nexus of science, public policy, and practice in child well-being. We consider next steps in applied science and scientific theory that connect the knowledge of child development and well-being to the work of communities, practitioners, and public systems. The monograph's core focus has been on foundational elements of well-being across physical, cognitive, and social and emotional development that, while co-determined and supported by the wider environment and culture, can be examined in the individual. We now consider how knowledge of the foundational elements of well-being, child development, and parenting intersect with decision-making among those wider social and political co-determinants of well-being.

#### 1. Science and Governing Framework

In some ways, the United States social/cultural/political framework may give science a potentially larger role in decisions affecting child well-being than countries where wellbeing is framed in terms of rights. The United States may think of child well-being as a natural unfolding of developmental potential where action outside the family is generally not warranted until problems arise. For instance, government action may be viewed as justified when there are problems whose scale requires a collective or a public solution and the public response will actually save future public expenditure. In this framework, science may be called upon to identify causal relationships and the possible impacts of alternative actions taken. The rights perspective does not ask science why something should be done but shares an interest in what science may be able to demonstrate as empirically effective to do.

This monograph has examined foundational elements that are dimensions of the individual but never developed exclusively by or through individual actions. Outside of a rights perspective, science may need to play a greater role in explicating social and systemic agency in order to move beyond the underlying popular assumption that the well-being of children in the Unites States could be determined unilaterally by the individual choices of their parents (Davidson, Moore & Rosenberg, in press).

## 2. Enhancing Indicators of Well-Being

This is an era in public funding and decision-making that endorses data-driven decisionmaking and results-based accountability for nations, states, and communities. Those devoted to child well-being can no longer evaluate their activities according to services provided or products distributed, but must also look to indicators to benchmark their progress. Indicators bridge the gap between large population surveillance and specific program evaluation; indicators provide the information for tracking progress, making thoughtful decisions, and designing effective programs. Currently, most communities interested in taking on child well-being work have no baseline from which to monitor a longitudinal view of the cumulative impact of many separate programs aimed at improving the lives of children.

Indicators are measures of desired results for which data can be made available. Indicators do not measure every dimension of an outcome but stand for important markers of the desired result. Too few indicators have been developed for child wellbeing. Especially absent are indicators that would track children's strengths or provide information at the community level. The adequacy of indicators for child well-being is



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contingent upon underlying measurement science, conceptual clarity, the availability and accessibility of place-based data, and collaboration with community partnerships to shape indicators that reflect valued composite outcomes for their particular child development activities.

Using an example from nutrition to illustrate, ensuring that people eat a healthy and nutritious diet may be an important community goal. Many kinds of activities in the community may be ongoing to help people understand nutrition, make sound dietary choices, and have access to affordable nutritious foods. Each activity would have its own program evaluation. A quantifiable indicator for the overall community goal of healthy diet could be the proportion of people there who consume at least 5 servings a day of fruits and vegetables. Consumption of fruits and vegetables represents only one aspect of a healthy diet yet it is an adequate indicator since it identifies one measurable aspect of the broad goal for which data can be obtained to represent the broader outcomes of interest. The community could track this indicator over time and use it as a benchmark to show their progress in all the activities contributing to improving the diet of people in the community.

Ideal indicators are both positive and reflective of the kinds of actions (not specific programs) that could achieve the desired goals. While child mortality and morbidity surveillance remain critically important, those outcomes are very distal from community activities. Rate decreases are heartening yet do not represent the activities and interventions that helped prevent the bad outcomes (and reduce the rate). To illustrate from literacy, positive indicators (time reading to young children) are more likely to direct attention to specific interventions that can improve outcomes than negative indicators (proportion of local 8 year-olds in the lowest quartile of national reading scores).

Positive indicators as measures of desired outcomes must have data available, even if the data are being collected for some other purpose and need only to be recognized as relevant to child well-being. Indicators do not measure every dimension of an outcome but stand for important markers of the outcome (Melaville, 1997). For example, ensuring that babies are "born healthy" may be an important community outcome to quantify. A quantifiable indicator for the general well-being goal of having babies "born healthy" could be the proportion of infants that weigh at least 2500 grams at delivery. Birth weight represents only one aspect of the "born healthy" outcome, but an indicator may identify one measurable aspect for which data can be obtained to represent the broader outcome of interest.

Indicators can provide data to evaluate effectiveness of community and systems-level initiatives for child well-being. When sound, nonpartisan, quantitative evidence is not accessible to decision makers, children get shortchanged. Useful indicators can serve as a lever to advance positive action for child well-being, support results-based programming, and stimulate investment in children's care and development. Things that cannot be measured or tracked over time through indicators do not garner public support, scientific understanding, sustainable investment, or comparable outcome information to stimulate best practices.

General steps to develop community-level indicators for child well-being are to:

#### Recruit

Identify the community partners and decision-makers for activities that support children's health, safety, and development. Engage these leaders and persons with expertise in data collection and analysis to operate as a project team to develop community indicators for child well-being.

#### Collaborate

The project team will collaborate in:

- 1) identifying outcomes of local interest within child well-being,
- 2) conceptualizing potential indicators,
- 3) identifying potential measures and data sources for the proposed indicators,



28

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- 4) developing feasible data collection strategies and protocols for the indicators, and
- 5) developing a plan for analyzing the indicator data, using it for community purposes, and providing access to indicator information from the project team back to the community at large.

#### Partner

Bring additional state public and private partners of interest into the community to provide any additional areas of consultation or technical assistance in accomplishing the collaborative steps above.

#### Communicate

Prepare and disseminate information to other communities about the identified indicators for child well-being and indicator development process. This can help build capacity for other communities and thereby increase the likelihood that they would undertake and evaluate community action for child well-being.

#### 3. Building a Directory of Indicators

A series of related activities in partnership with agencies, organizations, and outside experts could expand the accessibility and utility of indicators for child well-being that have been and will be developed for the population at large. In the United States, national and state-level indicators relevant to well-being currently are scattered among many different data sets provided by agencies in different sectors, for instance, commerce, health and human services, education, and juvenile justice. Existing indicators relating to child well-being are also more problem-focused (percentage of children in poverty) than strengths-based (percentage of students who volunteer). However, indicator information for child well-being would be more available and accessible if organized by developmental stages and presented in a searchable format. This information, stored perhaps on CD ROM and/or on the Internet, would comprise an Indicators Directory for Child Well-Being.

This searchable directory to house this information could be created if national level data sets across relevant domains were disaggregated for specific indicators of child and family well-being. Such a directory could support interdisciplinary work in child and family well-being and provide information to myriad constituencies that need reliable information for their work on behalf of children. This directory would need basic functions to operate at the skill level of a "point and click" user. It should be searchable by key words in categories such as developmental stages (toddler, adolescent), type of indicator (behavior, health outcome, economic security, family characteristics), and demographics of the sample (urban/rural, ethnicity).

Relevant data sets would be accessed from a broad spectrum of reliable monitoring systems that are under government direction: commerce, juvenile justice, health and human services, education, and so on. Multiple characteristics would be recorded for each indicator; characteristics could include a description of the indicator, data source, years of available data, sponsor of the data source, and mode of administration, survey sample design, level of analysis, and so forth. Assembling these existing indicators would serve to identify gaps in the current pool of child well-being indicators and stimulate expansion of the pool of relevant indicators and more regular monitoring.

A directory of indicators would support the applied work of many groups of people interested in child health and development: community planners, practitioners, policy makers, child serving organizations, scientists, journalists, and advocates. The primary value for some users would be in the directory's easy access to valid and reliable, current, quantitative information on a wide range of measures that impact children. The existing quantitative information is invisible to them because it is scattered across so many specialty surveys and, although in the public domain, not



publicly accessible. Collected and classified indicators could be used to direct attention and resources to underserved aspects of child health and development. They could provide nonpartisan information to address misperceptions about the well-being of children in the United States and to influence social will for progress.

What can be measured can be supported and improved. The directory could capture positive indicators that provide more direct measures of broad goals that many communities share, such as having children healthy and ready to learn when they enter school. For others, the directory could identify existing instruments with modules of questions that could be used in surveys of the local population to gather community-specific information for needs assessment or tracking progress.

#### 4. A Registry for Interventions

Developing a registry of effective interventions in child well-being is another next step that could support better child health, development, and welfare. In order to advance child well-being, communities, practitioners, policy makers, and advocates need to be able to identify existing interventions that have had empirical support and might be adapted to fit their local needs and population. People entrusted to make funding and programming decisions for child health and development want to choose successful activities for their communities and want to know what works. Policy makers and practitioners want to go with the best available evidence but may lack nonpartisan ways of recognizing the best evidence or determining how separate pieces of information fit together. Scientists cannot make overall recommendations about what works without a practical mechanism for assessing information from many separate studies. A registry of interventions would draw upon the synthesized functions of science and research analysis to create a product applicable for policy and practice.

Practice and intervention information assembled in a registry could be categorized by the evidence for efficacy or effectiveness. Communities, practitioners, and policy makers could access and use information from scientifically evaluated programs in order to establish programs in new settings and reach new groups of children. The registry could also house quantitative information formatted for scientists who would like to do meta-analyses -- for instance, a meta-analysis to determine the effect size of an intervention to improve problem solving skills.

A registry containing the evidence base of effective activities would enable those serving children and youth to make more informed decisions, as well as access information to support social will for child health and development. Activities in a registry could range in scope from multi-component systems, to programs, to discrete interventions. All would be useful in program planning and evidence-based decision-making if the registry were readily accessible through the Internet or via CD ROM, searchable by categories of interest, and easy to use. The registry contents could document which activities supporting well-being work, for whom they work, under what circumstances, and to what degree.

Information in this registry could be searched by topics that would be practical for users. Categories might include:

- Outcomes of interest according to specific well-being indicators
- Risk or protective factors affected by the activity, such as problem solving or communication skills
- Environment for the activity, such as school, pediatric clinic, or faith-based community organization
- Structural level of activity, such as system, program, or individual intervention
- Type of activity, such as home visitation or mentoring
- Demographic information, such as developmental stage of the participants served or gender
- Implementation information, such as cost or training required



Of course, additional studies and updates would need to be entered in the same system to keep the registry current.

To be useful and feasible, a registry must focus on a manageable number of outcomes that are valued by large numbers of communities, organizations, and providers. It must reflect a trans-disciplinary perspective, since children are not sorted into academic fields of inquiry. It must reflect logical, defensible, replicable, and explicit criteria for inclusion and exclusion of studies and effectiveness categories. Effectiveness categories are generally grouped as proven, potential, and promising. The lowest category of effectiveness must be broad enough to include activities that:

- 1) are logically consistent with a mainstream theory,
- 2) reflect expert opinion, and
- 3) have been implemented and are not known to cause harm.

The search functionality of a web or CD ROM format would be critical for the registry. For example, an organization providing after-school activities might search for implementation information about mentoring programs that have demonstrated effectiveness. The organization could compare the characteristics of successful mentoring programs to the program specifications under consideration. The search function allows users with a variety of interests to make best use of the available information. Development of a registry would meld science and information technology in the service of policy and practice to improve child well-being.

#### 5. Development of a National Index of Well-Being

In the same way that a nation can use composite measures in indices to track inflation, unemployment, and poverty, it is important to monitor the well-being of the population, particularly children (Hauser, Brown, & Prosser, 1997). Well-being can be tracked over time and across sub-groups (Moore, 1997) and could be the subject of a national index functionally analogous to the consumer price index in the United States. A number of researchers have independently explored development of a U. S. national index of child well-being. Recently, Neil Bennett (1999) presented "Indices of Child Well-being in the United States, 1980-1996" and Kenneth Land (2000) presented "Child Well-being in the United States, 1975-1998: Some Findings from a New Index."

A broad national index could serve as a tool for tracking social policy and shaping social will. A composite index of well-being would weight the contribution of multiple domains of well-being, such as health, economic security, and social and emotional function. Similarly, a quantitative value for each domain would be determined by a weighted formula incorporating selected indicators that could be tracked over time. The technical aspects of index construction offer many viable solutions, but the critical issue will be fitting logistical decisions, such as the selection of relevant domains, indicator selection, and a weighting formula, to an agreed upon purpose for the index. The selections that are made in index composition and calculation methods will shape what picture of child well-being is offered by the index. For instance, formulae that differentially weight data representing indicators of children's health could change whether the same index shows the well-being of children to be improving or declining over time.

More stakeholders may support tracking a set of well-being indices for important domains, such as child health, educational development and others, than reporting by a single well-being index. Then, too, options for indicators to construct a single national index are more limited the further back in time one wishes to trace changes in well-being. The current selection of well-being indicators is wider than available in the past. Beginning a national index may be less politically charged if present-time indicators and a current calculus serve as the original benchmark rather than choosing historical indicators and a retrospective starting point for trends.



An unresolved and technically challenging problem is the adjustment of available indicators within an index to proportionally represent demographic distribution of children in the national population instead of a population group over-represented by the particular indicator. For example, youth suicide rates might be an important indicator for the domain of emotional well-being. However, youth suicides in the United States occur predominantly among white males and their suicide rates increase markedly with age from 14 through 18. Using unadjusted youth suicide rates would over-represent older white males as determinants of emotional well-being in a national index. Similar considerations of how to address the relative significance of different developmental stages during childhood in some overall calculus of child well-being have not been resolved.

#### 6. Establishing the Parenting Network

Encouraging strengths in children is every parent's priority, yet finding the resources to nurture a child's positive development is often time-consuming and difficult. The Center for Child Well-Being values the parents' roles and is dedicated to providing parents with the supports they need to improve well-being in children. With this goal in mind, the Center for Child Well-Being established a Parenting Network.

The Parenting Network is composed of a group of ten experts from diverse backgrounds and disciplines committed to supporting parents in their efforts to foster positive development in their children. The goal of the Network is to develop and make available products for professionals and policy-makers who work to support parents through programs, services, or policies in communities. Members of the Parenting Network are geographically dispersed and represent a wide array of organizations, disciplines, professions, sectors of society, perspectives, and beliefs. Network members are parents, scientists, practitioners, and advocates who are committed to helping parents build an environment that offers parents and their children the opportunity to flourish.

The Parenting Network unites knowledge from research with wisdom from experience to design practical products that will help parents better understand their child's development, reduce parenting stress, and ultimately, advance child well-being. The need for easily accessible information that will both teach parents about their child's development and help parents cope with parenting stress cannot be overstated. While there is a plethora of child development information, it is often expressed in a poorly explained, unusable form (Sameroff & Feil, 1985). Furthermore, information for parents frequently has confidence-undermining overtones, assuming that parents lack competence (Goodnow, 1985). A recent survey of parents and professionals conducted by the Center revealed that 84% of respondents believed that parents wanted effective products that would help them identify and relieve parenting stresses. The Parenting Network will develop practical products to help address these needs.

## VI. The Future of Child Well-Being

The ultimate purpose of each of these tools and others being developed around the world is support for the day-to-day well-being of children and families. Holistic attention to the well-being of children under girds their full economic, social, political, and cultural participation over the life course. A means of linking and organizing our approaches to improving child well-being can accelerate progress and maximize finite resources. Developing a strategic plan to advance the well-being of children and creating an alliance of partners to carry out the plan are vital steps in the global community's action on behalf of children.



#### 1. A Strategic Plan to Advance Child Well-Being and Benefits of a Plan

While many kinds of activities can make significant contributions in addressing the global needs of children, working from an overall strategic plan for child well-being would offer important advantages:

- A strategic plan for child well-being can raise awareness and help make children a priority. This can help direct resources of all kinds to children's unmet needs.
- A strategic plan provides an opportunity to use public-private partnerships to engage those who may not have considered child well-being within their purview. It supports collaboration across a broad spectrum of ministries, agencies, institutions, groups, and community leaders as implementation partners.
- A strategic plan can link information from many child advocacy, child development, and prevention programs to avoid unintentional duplication and disseminate information about successful interventions.
- A strategic plan can direct attention to measures that benefit the whole population and, by that means, reduce the social costs of poor child development before vulnerable children develop problems.
- Development of a strategic plan can bring together multiple disciplines and perspectives to create an integrated system of interventions across different levels, such as the family, the individual, schools, the community, and the health care system.
- Collaborating in a strategic plan can help develop priorities in an equitable way. Resources are always finite and priorities direct resources to projects that are likely to address the greatest needs and achieve the greatest benefits. Some kinds of expertise are not available across all communities.
- A strategic plan can provide technical assistance with valuable kinds of expertise to strengthen community programs for children.
- An evidence-based strategic plan can maximize success when recommendations are implemented locally. Sound evaluation of community programs, in turn, builds the evidence base.

A strategic plan for child well-being has many interrelated elements contributing to success in improving the lives of children and their families. Sometimes a written document describing the strategic plan is assumed to be the entire strategy. However, a planned strategy has key functional elements as well as written descriptions of these operations:

- A means of engaging a broad and diverse group of partners to develop, implement, and refine the strategy with the support of public and private social policies
- A summary of the scope of the issue and consensus on priorities

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- Specified strategic aims, goals, and measurable objectives integrated into a conceptual framework for child well-being
- A sustainable and functional operating structure for partners with authority, funding, responsibility, and accountability for cross-cutting aspects of implementation of the strategy
- Agreements among ministries, agencies and institutions outlining and coordinating their appropriate segments of the strategy
- Appropriate and valuable activities for practitioners, policy makers, service providers, communities, families, agencies, and other partners
- A data collection and evaluation system to track information on child wellbeing and benchmarks for strategy progress



#### 2. An Alliance of Child Well-Being Partners

To realize success, a strategy for child well-being needs the collective leadership of an alliance of partners. The strategy provides a common agenda for action and the alliance of child well-being partners brings together the agencies, organizations, and individuals to get the job done. The alliance would be charged to ensure broad participation among partners from the public and private sectors and connect necessary resources for action. Sectors working in different arenas need opportunities to build connections among the specific issues, populations served, approaches, and kinds of expertise that they bring to child well-being. The alliance would accelerate implementation of the strategy by increasing awareness, identifying action priorities, facilitating and giving a guiding rationale for constituent ownership of the goals and objectives, and assessing resources and progress in child well-being. In sum, the alliance creates a platform for scaled-up activities to close the gap between what we know and what we do.

The alliance of partners can provide collective leadership, information exchange, and an organizing structure for knowledge development and partnership support. More specific products and services to be considered are outlined below. The alliance could:

- Coordinate a big picture approach to child well-being activities among participants whose individual activities have a more discrete focus, such as public health, research, advocacy, business, faith-based services, policy development, community based organizations, education, clinical services, science, and others. If participant activities are mapped into the strategy goals and objectives, the alliance can identify gaps and opportunities for collaboration.
- Oversee stakeholder participation in developing more detailed implementation plans for strategy objectives. Implementation plans would build on a map of existing activities and baseline indicator data for objectives to:
  - 1) prioritize next steps,
  - 2) make specific recommendations for funding and entities to carry out needed activities, and
  - 3) integrate products and outcomes across objectives to speed progress.
- Provide visibility and garner support (including funding) for child well-being by implementing a communications strategy that could include making public presentations on the strategy, issuing briefings, publishing a newsletter, and distributing an action calendar of public events, working meetings, or other relevant happenings.
- Establish priority agendas and convene working meetings of stakeholders to provide information exchange, peer learning, and skills building for implementing the strategy.
- Publish an annual report of child well-being progress. This broad report would incorporate
  - 1) the status of strategy activities and plans,
  - 2) information from child well-being surveillance,
    - 3) other relevant quantitative indicators of outcomes for child well-being activities,
    - 4) a measure of current public sector and philanthropic investments in child well-being, and
    - 5) a gauge of relevant social/political will.
- Expand the number of partners in child well-being activities. Engage in outreach asking, in effect, what can you or your organization do to contribute to the lives of children for the people you serve as described by the Strategy objectives and priority activities. Provide reinforcement that effective partnerships matter through appreciation awards or other recognitions.



34

Organize stakeholder participation in revising the strategy in an iterative process that will incorporate new developments in research, practice, and policy. Provide a voice for partners to contribute in identifying strategies for filling gaps in knowledge, applications, awareness, and evaluation related to the well-being of all children

"Much of the next millennium can be seen in how we care for our children today. Tomorrow's world may be influenced by science and technology, but more than anything, it is already taking shape in the bodies and minds of our children." – Kofi Annan, Secretary-General of the United Nations

Working together, we can foster and sustain the improvements in children's lives that will make a significant difference. Committed partners in communities across the globe can develop a coordinated and evidence-based approach to child health and development. Action built on this foundation can transform today and tomorrow.

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38

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